



QWC Services exists to consult, train and provide a variety of knowledge for companies and their personnel across many industries. The services we offer are designed for craft personnel, supervisors, management, construction managers, QA/QC personnel, engineers, and company leaders.

All personnel that complete Training Classes will receive a “QWC Services Certificate of Completion”.

All personnel that complete Workshops / Hands-on Code Clinics will be issued a “QWC Services Certification” certifying that the individual has met the minimum requirements to apply the body of knowledge.

Our services listed in this document are not a complete compilation of all services. Other services may be offered than what is listed here – e.g., fabrication shop setup, fabrication strategies, and fabrication tracking, supervisor training, and more. Please inquire about other services and to potentially combine or separate our services to fit your specific needs.

Jerry Salter

CEO & Founder

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- ✓ *Subject Matter Expert*
- ✓ *Instructor*
- ✓ *Trainer*
- ✓ *ASNT NDT Level III*
- ✓ *Litigation SME – Construction Codes, Welding Inspection & Technology, Quality Assurance, and Quality Control Expert Witness*
- ✓ *Problem Solver*



ASNT NDT Level III Services

- Standard Written Practice written in accordance with ASNT's *SNT-TC-1A* or *CP-189*.
 - This also includes all documentation for:
 - Training Log for experience hours in method and classroom training.
 - Training Record – Record of initial qualification requirements (education level), experience and training hours. Also, continuity hours are recorded with certification for verifications.
 - Visual Examination - Visual Examination Record with instructions, example document for correct completion of the record, and the Visual Examination Record (VER). The VER documents the required examination results from the Ophthalmic Professional for near vision acuity and color perception (Ishihara test). This record also provides a certification statement for the examination to have been reviewed for accuracy and meets the requirements of SNT-TC-1A and other *additional Code requirements*.

- Review, approval, and certification of an existing Standard Written Practice to ASNT's *SNT-TC-1A* or *CP-189*.

- *NDT Level II (VT) Visual Testing* – **Certification only**, no additional training or testing is required, as determined by the ASNT NDT Level III.

- *NDT Level II (VT) Visual Testing* – **Required Tests and Certification**. Experience and training hours have already been attained and documented, as verified by the ASNT NDT Level III.

- *NDT Level II (VT) Visual Testing* – **Classroom Training, Testing and Certification**. Experience hours have already been attained and documented, as verified by the ASNT NDT Level III.

- *NDT Level II (VT) Visual Testing* – **Required Tests and Certification**. Experience and training hours have already been attained and documented, as verified by the ASNT NDT Level III.



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- *3rd Party ASNT NDT Level III Client Representation.*

Manual & Procedure Writing Services

- **Standard Written Practice** training curriculum.
 - This includes a full instructional curriculum manual with all required areas of training for General Knowledge, Specific Method, and Practical/Fundamental by ASNT to meet SNT-TC-1A or CP-189.
- **Visual Testing Procedure (VT)** written in accordance with ASME Section V as required by all ASME Codes & Standards (e.g. ASME BPVC Sections I, III, IV, VIII, XI; ASME B31 Pressure Piping Standards B31.1, B31.3, B31.5, B31.9, BPE). Other NDT Method procedures may be written with a potential cost difference.
- **PQR & WPS Review and Approval**. This pertains to welding, brazing, bonding (Solvent Cement, FRP) of any materials and welding, brazing, bonding processes – any incorrect information will be noted but not rewritten.
- **PQR & WPS Writing** in accordance with ASME, AWS, or API. This pertains to welding, brazing, bonding (Solvent Cement, FRP) of any materials and welding, brazing, bonding processes – a cost provided is for one PQR/WPS combo however bundle discounts may be given for more than one.
- **Standard Operating Procedure** (single). Bundled SOP libraries to create a Quality Manual may be created at a negotiated separate cost.
- **Quality Assurance Manual (QAM), Quality Control Manual (QCM), or Quality Control Procedures Manual (QCPM)**.
- **Code-Stamp Quality Programs** for R, S, & U-Stamps. Quality Programs for other purposes can also be provided such as ISO 9001 certification, ASME BPE Stamp.

Other training for Manuals and Procedures may also be offered. Please inquire about other training you may need in these areas.



Training – Quality Assurance and Quality Control

- “How to Write a **Quality Program & What to Include**”
- “How to write a complete **Quality Assurance Manual**”
- “How to write a complete **Quality Control Manual**”
- “How to write a complete **Quality Control Procedures Manual**”

Each training class above are 1-day classes (8 hours)

- **ASME Section IX Welding Procedure Training** (50 hours) – General Knowledge (PQR/WPS/WPQ)
- **** ASME Section IX Welding Procedure Workshop: A Hands-on Clinic** (80 hours) – A deep dive and in-depth workshop on general & specific fundamental training. This class will also give highly valuable hands-on training on *practical applications* for PQRs, WPSs, and WPQs. Students will learn the proper way to qualify and write each according to Code requirements.
- **** AWS B2.1 & AWS D1.1 Welding Procedure Workshop: A Hands-on Clinic** (80 hours) – A deep dive and in-depth workshop on general & specific fundamental training. This class will also give highly valuable hands-on training on *practical applications* for PQRs, WPSs, and WPQs. Students will learn the proper way to qualify and write each according to Code requirements.
 - AWS D1.1 may be replaced with either the AWS D1.4 or AWS D1.6 Codes
- **Welding Inspection Technology for Inspectors** (50 hours)
 - Welding Safety
 - Processes for Metal Joining
 - Metal & Mechanical Cutting
 - Weld Symbols & Joint Geometry
 - Governing Documents for Weld Inspection & Qualification



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- Destructive Testing of Mechanical & Chemical Properties

 - Basic Welding Metallurgy
 - Weld & Base Metal Discontinuities
 - Basic Overview of NDE Methods

 - **ASME BPE Protocol (50 hours)**
 - Working in accordance with ASME BPE and SOPs
 - Weld Test Training
 - Material Receipt Inspection
 - SOP Training
 - Isometric (ISO) drawing reading & interpretation
 - Documentation training – Coupon Log, Weld Log, Red-lining of ISOs

Other Training for Quality Assurance, Quality Control may also be offered. Please inquire about other training you may need in these areas.



Code Classes

- Code Training – **ASME Section IX: Welding, Brazing, and Fusing Qualifications** (40 hours)
- Code Training – **AWS B2.1 Welding Procedure Qualification** (40 hours)
- Code Training – **ASME BPE: Bioprocessing Equipment** (40 hours)
- Code Training – **ASME B31.1: Power Piping** (40 hours)
- Code Training – **ASME B31.3: Process Piping** (40 hours)
- Code Training – **ASME B31.1& B31.3 Overview: Power & Process Piping** (40 hours)
- Code Training – **ASME B31.9: Building Services** (40 hours)
- Code Training – **ASME Section II Parts A, B, & C: Base & Filler Metals** (24 hours)
- Code Training – **AWS D1.1 Structural Welding Code – Steel** (40 hours)
- Code Training – **AWS D1.3 Structural Welding Code – Sheet Steel** (40 hours)
- Code Training – **AWS D1.6 Structural Welding Code – Stainless Steel** (40 hours)
- Code Training – **API 1104 Pipeline Code** (40 hours)
- Code Training – **ASME Section I Power Boilers** (40 hours)
- Code Training – **SEMI Standards – Microelectronics Industry** (40 hours)
- Code Training – **3-A Sanitary Standards – Food, Dairy, Beverage** (40 hours)

Other Code Classes may also be offered. Please inquire about other training you may need in these areas



Welder Training – Fundamentals, Practical, Code Protocol, and Weld Inspection for Welders

- **Welder Training – Fundamentals**
 - **Manual GTAW (TIG)** – (10 hours)
 - **Automatic GTAW (TIG) – Orbital Autogenous** (10 hours)
 - **SMAW (STICK)** – (10 hours)
 - **GMAW (MIG) – Globular, Spray, Pulsed, Short Circuit** (20 hours)
 - Other welding process fundamentals may also be offered

- **Welder Training – Practical**
 - **Manual GTAW (TIG)** – (40 hours)
 - **Automatic GTAW (TIG) – Orbital Autogenous** (20 hours)
 - **SMAW (STICK)** – (40 hours)
 - **GMAW (MIG) – Globular, Spray, Pulsed, Short Circuit** (40 hours)
 - Other welding process fundamentals may also be offered

- **Welder Training – ASME BPE Protocol** (40 hours)
 - Welding in accordance with ASME BPE
 - Equipment setup
 - Purging
 - Documentation – Coupon Log & Weld Log

- **Welder Training – Weld Inspection for Welders**
 - **ASME B31.1 Power Piping** (10 hours)
 - **ASME B31.3 Process Piping** (10 hours)
 - **ASME B31.9 Building Services** (10 hours)
 - **ASME BPE – Bioprocessing Equipment** (10 hours)
 - **AWS D1.1 Structural Welding Code – Steel** (10 hours)
 - **AWS D1.3 Structural Welding Code – Sheet Steel** (10 hours)
 - **AWS D1.6 Structural Welding Code - Stainless Steel** (10 hours)

- **ASME BPE Orbital Welding Class** – Fundamentals of orbital welding to meet ASME BPE Standard (40 hours)



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- **Welding Inspection Technology for Welders (40 hours)**
 - Welding Safety
 - Processes for Metal Joining
 - Metal & Mechanical Cutting
 - Weld Symbols & Joint Geometry
 - Weld & Base Metal Discontinuities
 - Basic Overview of NDE Methods

Other Welder Training may also be offered. Please inquire about other training you may need in these areas.



Training – Methodologies

- **Total Quality Management – TQM** (40 hours)
- **Total Welding Management – TWM** (40 hours)

Other Training Methodologies may also be offered. Please inquire about other training you may need in these areas.